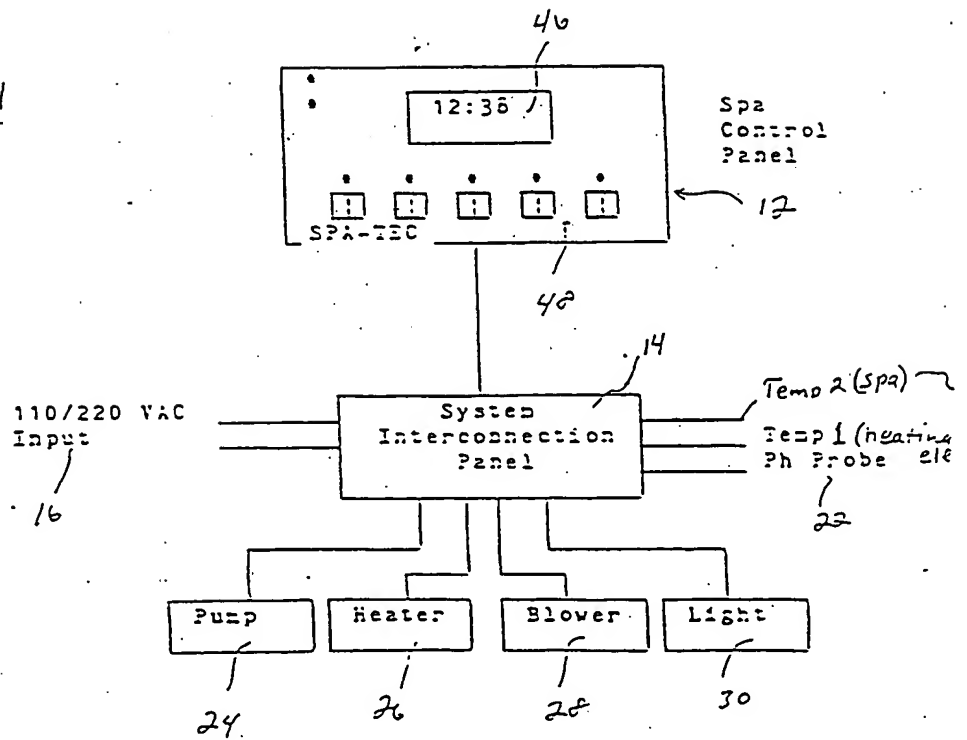


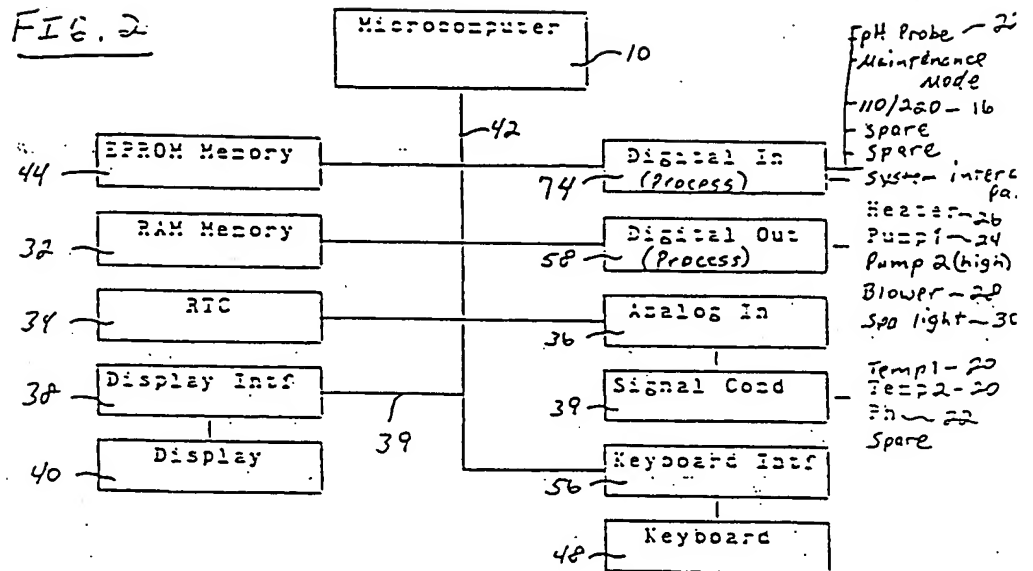
10043799-010002

FIG. 1



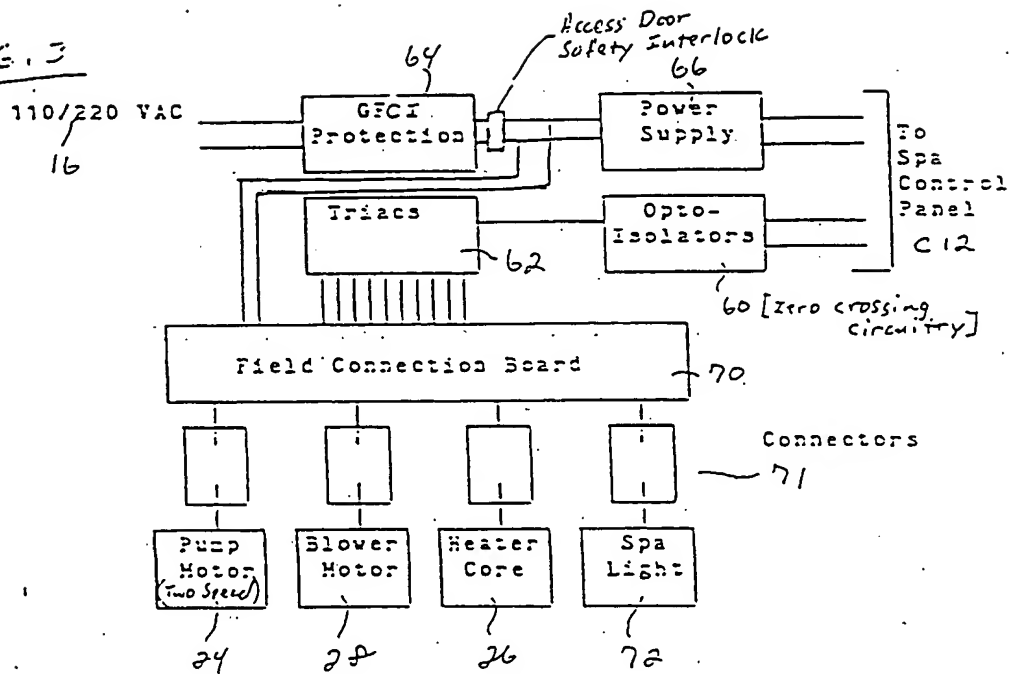
10043799-010001

FIG. 2



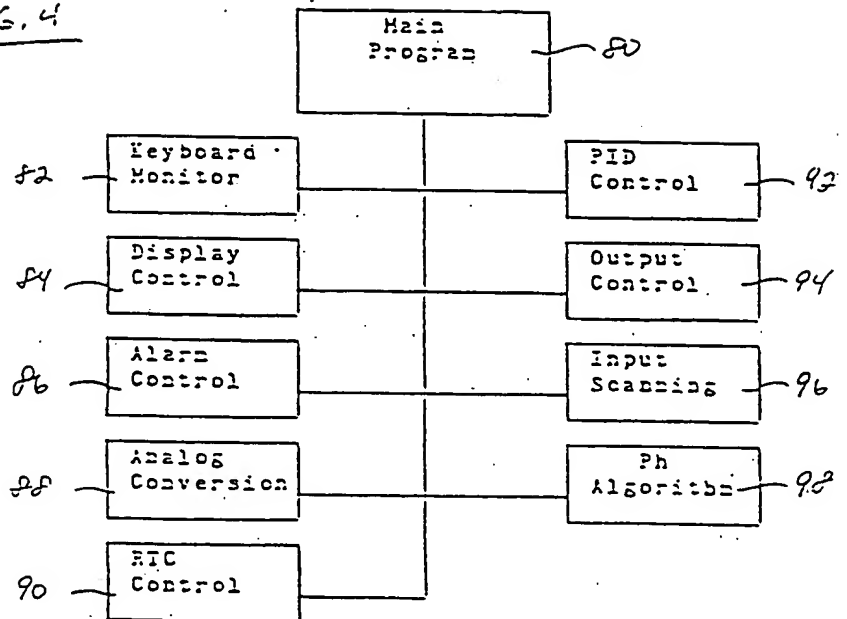
10043799-010902

FIG. 3



10043799-010902

FIG. 4



10043799.010902

FIG. 5

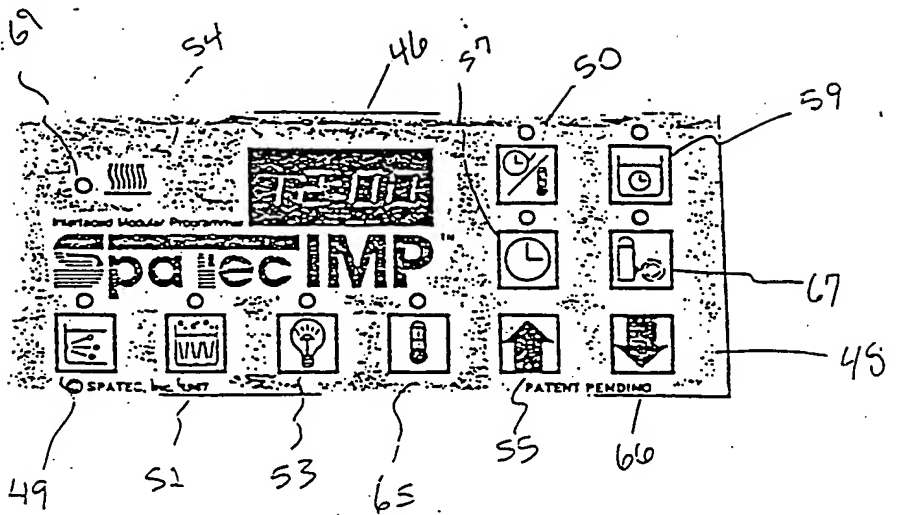


FIG. 6 - Overall flow or control

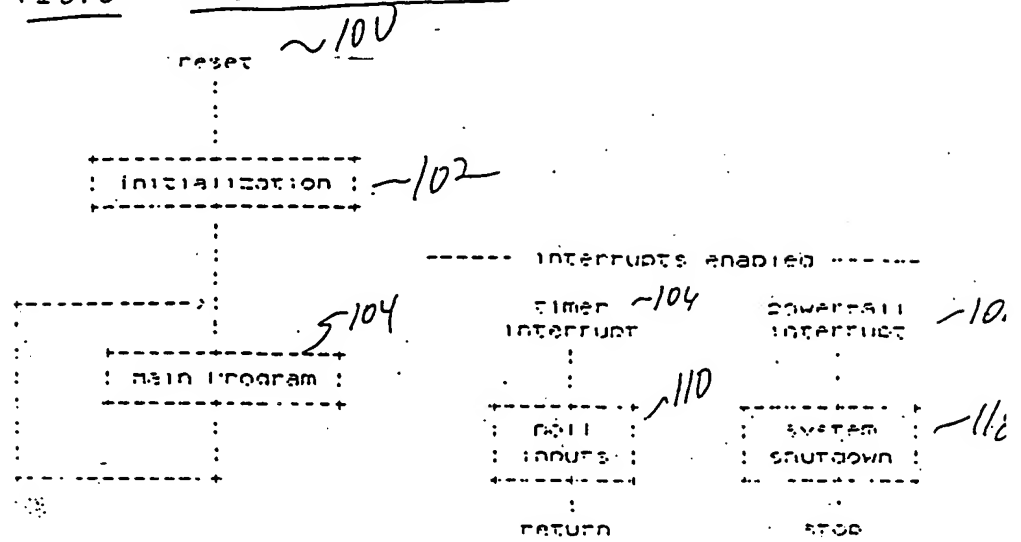


FIG. 7

Temp_F = Desired Temperature of Spa Water

Temp₁ = Temperature at First Sensor (S₁)

Temp₂ = Temperature at Second Sensor (S₂)

Temp_D = Temp₁ - Temp₂

'ΔL' = Limit of acceptable temperature difference (plus or minus).

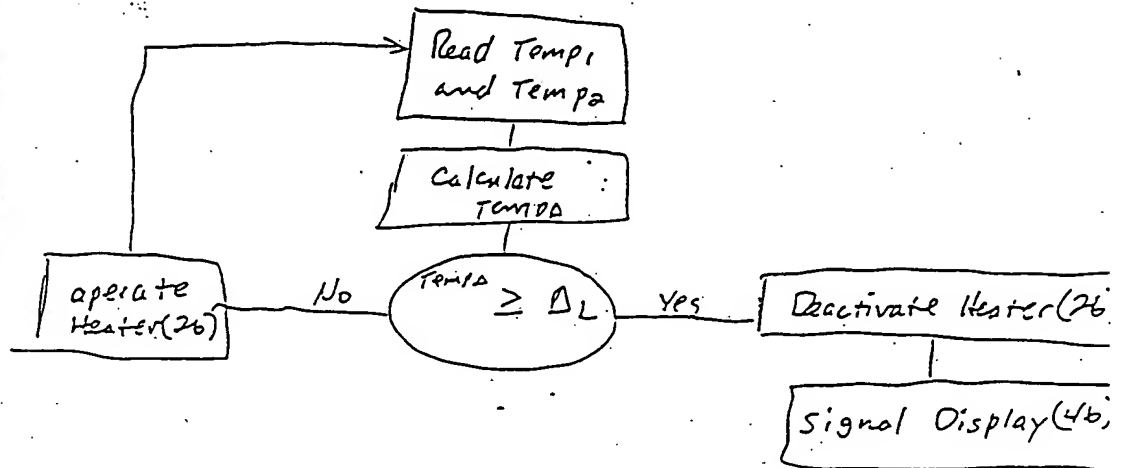
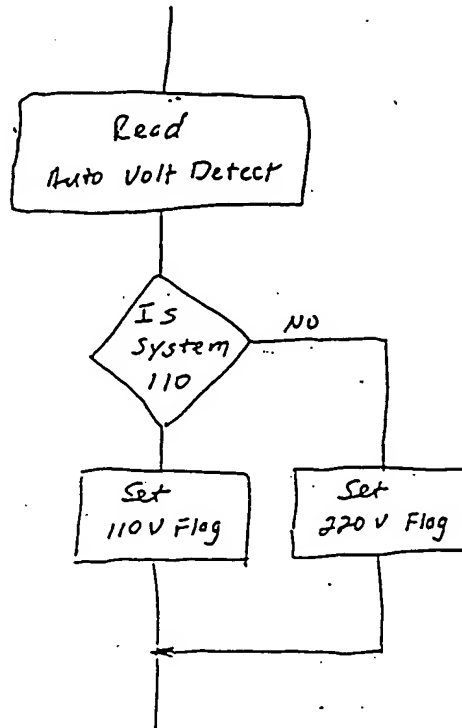


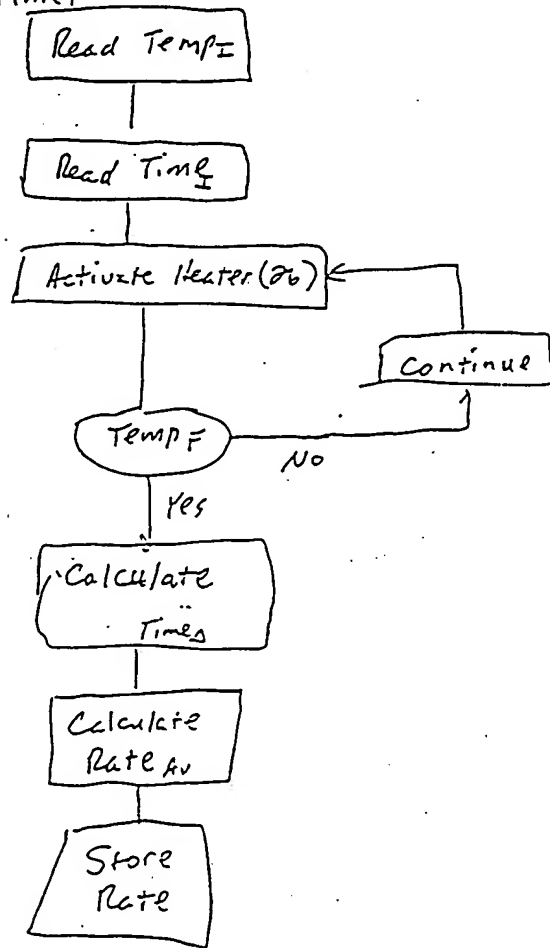
FIG. 8



10043799-010902

FIG. 9

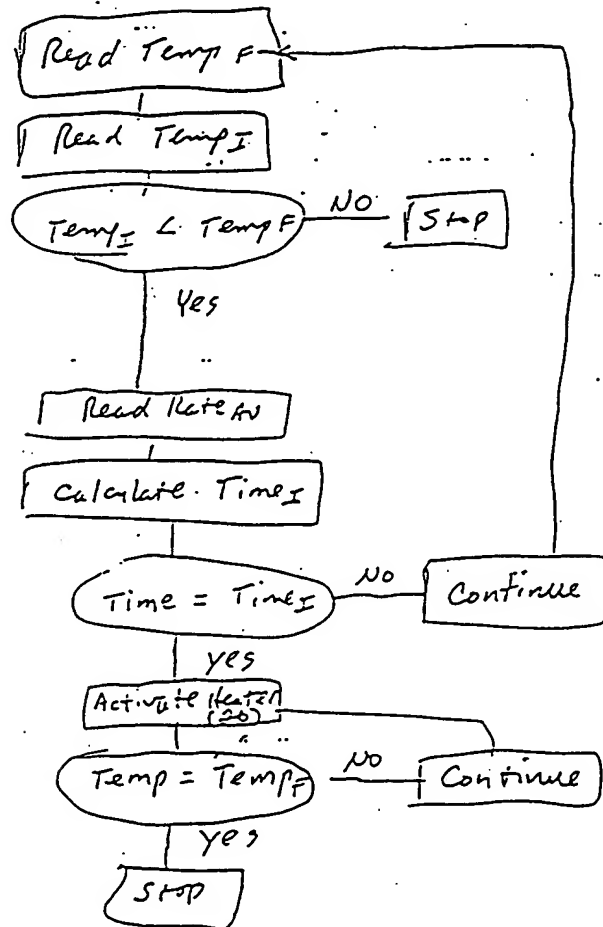
$Rate = \text{Rate of Heating}$
 $Rate_{Av} = \text{Rate of Heating (average)}$
 $Temp_F = \text{Desired temperature of Spa water}$
 $Temp_I = \text{Initial temperature of Spa water}$
 $Temp_{\Delta} = Temp_F - Temp_I$
 $Time_I = \text{Time (initial)}$
 $Time_F = \text{Time (final)}$
 $Time_{\Delta} = Time_F - Time_I$



10043799-010900

FIG 10

$Temp_I$ = Initial temperature of Spa water
 $Temp_F$ = Final temperature (desired) of Spa water
 $Temp_D = Temp_F - Temp_I$
 $Rate$ = Rate of Heating
 $Rate_{AV}$ = Rate of Heating (average)
 $Time_I$ = Initial time
 $Time_F$ = Final time
 $Time_D = Time_F - Time_I$



10043799.010902

FIG. 11

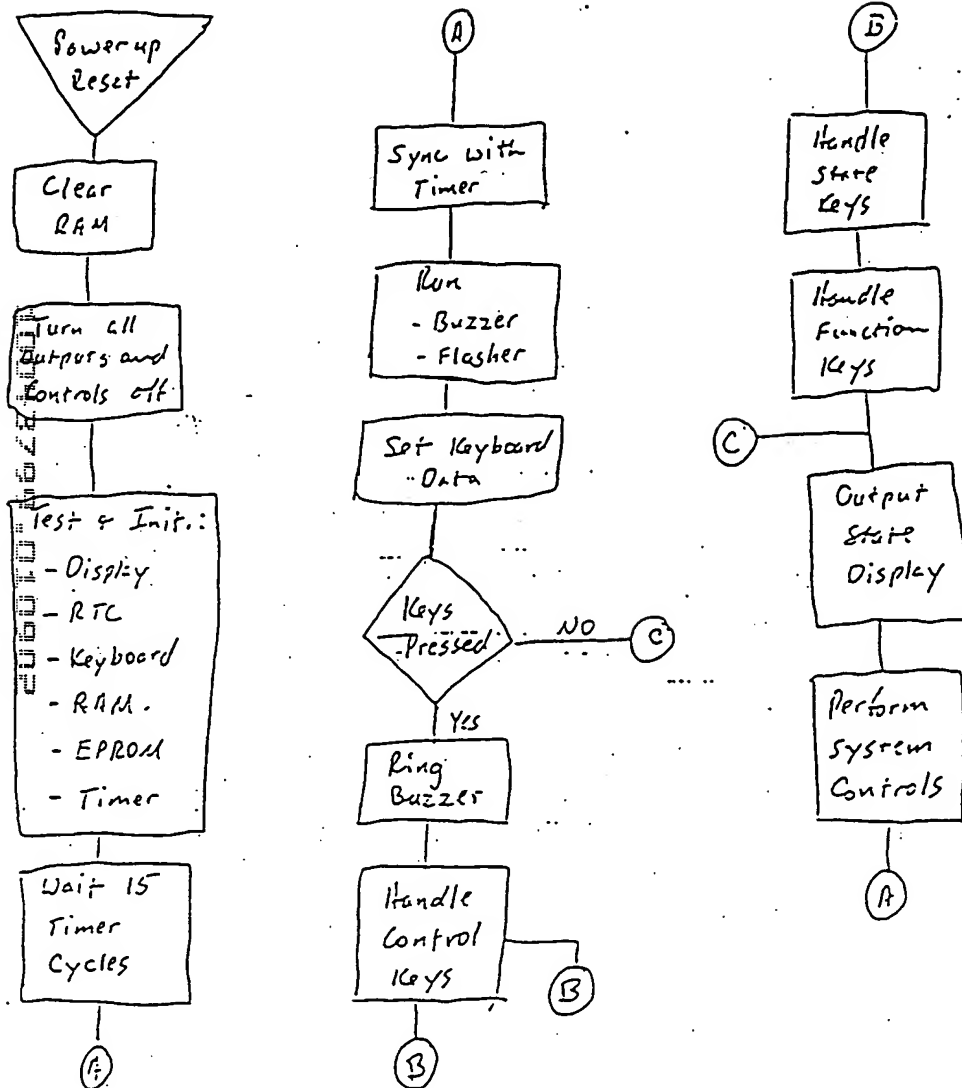


FIG. 12

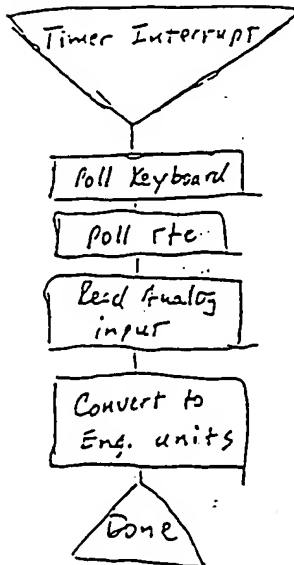


FIG. 13

